YALE'S OARSMEN IN TRAINING FOR THE GREAT RACE.

Snap Shots at the Strong Men of Harvard's Ancient Rival.

Hard at Work for the Big Event at Poughkeepsie in Next July.

It is a settled fact that Yale and Harvard are to compete upon the water next July. Cornell will be in the race, too, but this will serve rather to make keener the struggle between the crews of the two older colleges. If any one doubts the earnestness of the collegians he should visit the rival institutions and note the active preparations already well under way.

As soon as the good news got about in college circles athletics underwent a boom. There will be a couple of thousand shouters for the blue and as many more followers of the crimson, but, of course, only eight men from each college will have the final honor of pulling in the rival crews. Captain Bailey, of Yale, and Captain Goodrich, of Harvard, are hard at work upon old and new candidates. Several trial crews of eight men were selected and thoroughly tried from time to time, and from the fittest of these the final crew will be made up.

Good men are not lacking at Yale or at Harvard, for at both colleges are scores of men of magnificent physique. To adapt their special physical qualifications to aquatics and to select only the very best men is no small task.

Meanwhile the gymnasiums are crowded and the rowing machines are kept warm from morning till night. Down in the "tank houses" the captains are coaching their men, who are working like beavers, in the stationary boats, every day in the week but Sunday. The weeding-out process has ended, and from now on it will be a test of the survival of the fittest. When the great day comes and the struggle is over, the crew that drags the colors of its rival back to its trophy hall will have something to crow about, for this race will be a memorable one.

The course of physical training through which a 'varsity oarsman must go is little understood. First, he must be physically perfect; he must be strong, active, obedient, susceptible of aquatic instruction and must have good wind. He must also have "sand." He must undergo a siege of coaching and hard work, which he never would undertake for any cause other than that of serving his college. A crew man becomes a real hero—a hero in self-denial, self-sacrifice, and in the mechanical drudgery of learning how best to use his strength.

A Journal man walked up the broad marble staircase leading to the gymnasium at Yale, the other day, and paused before the open doors of the trophy room. College scalps galore adorn this room, and they came from almost every important institution of learning in the land. The gymnasium at Yale is admittedly the finest in the United States. Exteriorally it is a handsome structure, of light-colored pressed brick, ornamented with stone, and covers almost half a city block. The lower floors are devoted to baths, rowing tanks, dressing rooms and offices, and the gymnasium proper is on the upper floor. A broad glass roof lets in the sunlight, and a perfect system of ventilation keeps the air pure and tempered equably.

There were perhaps two hundred students at work upon the main floor, and in the gallery, where the running track is located, a score or more were exercising.

Dr. William G. Anderson, associate director, is in personal charge, and is ably assisted by Mr. George A. May. Perfect order is maintained at all times, and even when the Journal man began to make photographs not a student left his work to see what was going on.

"Every student who enters this gymnasium," said Dr. Anderson, "receives one of our little books. In it is a physician's prescription for such exercise as will be most beneficial to him. He finds in this book a chart of the human body, showing by means of pencil check marks where his weakest parts lie. The parts most in need of development are marked, and he is shown the proper gymnastic exercises to correct and improve them. Courses of physical training are here laid down for the development of all parts of the body, and it is astonishing how perfectly the system works. The boys take an interest in everything they do, and that is half the battle.

"The gymnasium is thoroughly and completely equipped, and, although you see dozens and dozens of different sorts of machines on this floor and about the walls, there isn't a bit of dead wood anywhere. We make good use of it all.

"The Journal wants to know what training athletes have to go through before they can hope to become members of the Yale crew? A good idea. I'll show you the various methods we have for developing the muscles, and then will show you the floor work the crews are put through here in the gymnasium."

On one side of the large hall, fastened securely to the wainscoting, was an iron wheel, perhaps thirty inches in diameter. It was a yacht's steering wheel, to which were attached adjustable brakes, upon which pressure can be applied to any desired degree. Grasping the spokes of this wheel, Mr. May, turning it first to the left and then to the right, keeping his feet firmly fixed to the floor, showed how the wheel aided in the development of the muscles about the waist and lower back. Mr. May is a pretty well developed specimen, to begin with, and when he began to move the wheel, great knots of muscle stood out upon his sides and lower back, where half the men in New York never imagined any muscles grew. His white skin, as smooth as satin, glowed under the exercise, and the working of the muscles under it could be plainly seen.

"The waist wheel," as it is called, comes into constant play. The aspirants for aquatic honors, do their work sitting down, as a matter of course, and it is incumbent upon them to develop and strengthen the muscles of the waist and back to the highest degree.

When an oarsman is in a sitting position, with body well forward and arms outstretched, as he would be when beginning a stroke, the head is erect and there is a great strain on the muscles of the neck. To strengthen these, a queer device is used, consisting of two bands of webbing, such as saddle cinches are made from, so constructed as to fit over the head. The bands are attached to cords which, operating through a series of pulleys, raise the lower iron weights, as the head of the athlete is moved forward or backward.

Charles Gloth, of the class of '97, was exercising upon this machine when the Journal's photograph was taken. Gloth is a young man of magnificent physique, strong as a cart horse, active, and in as nearly perfect condition as a man can well be. When the weights of the machine were lifted to their highest point, by the backward motion of his head, the muscles on the neck stood out like rolls of rubber. It looks easy to work that machine, as he works it, but if any save an athlete handled it in so familiar a manner, it would be very apt to yank him up against the wall, bang his nose and otherwise maltreat him.

One of the newest devices in the gymnasium is the chest developing apparatus. It's a lazy looking machine and was exploited by Mr. W. D. McKell, of the law class. Dr. Anderson declares that, while it is a new idea, it is one of the best appliances for its purpose he has ever seen, and produces excellent results.

Attached to the wall on the side of the gymnasium was a machine with two horizontal bars protruding from it, perhaps four and a half feet from the floor. A young Hercules had his head under these bars and was jiggering his body up and down with the punctuality and regularity of clock work. It looked for all the world as if he were scratching his back against the wall, but he wasn't—he was adding new strength to a lot of powerful looking muscles on his neck and shoulders, and at the same time exercising the thighs and calves. The bars above his head were connected by a leather pad, and although he worked the machine with apparent ease, there was a bunch of iron weights upon either side of it that went up and down every time he did. Mr. W. P. Johnsop, of the class of '98, is shown working this machine.

One of the 'varsity crew is pictured in another photograph at work upon one of the rowing machines. He has arms like a blacksmith and a chest like a bellows. He had been the rounds of the big gym., working every machine he came across, and was in a steaming prespiration when he was photographed. But his wind was as sound as if he had just arisen from a refreshing sleep.

Mr. May then showed the adaptability of the aerial parallel bars (a machine for developing the muscles of the upper arm) and other paraphernalia of the gymnasium. By the time he had finished class work had begun and some of the preliminary stages of training for aquatic honors were seen.

In one corner of the hall were eight young men. They were the freshmen crew and were taking their first medicine. They stood in a circle and followed the directions of their instructor to the letter. A series of swaying motions from side to side, bending the body far over, was repeated ten or a dozen times, then changed to a forward and back bend. These motions lend agility and suppleness to the body, abdomen and waist, and they call forth a great deal of muscular effort, too. Then they began hopping up and down, first on one leg and then upon the other, then crouching to the floor, with hands clenched, as if grasping an imaginary oar; then various calisthenic exercises which tend to give flexibility and strength to the arms and shoulders; then the rotating motion of the arms, as in rowing.

By the time the class has endured twenty minutes of this exercise, the members know they have been doing something, but that is only a starter. Then comes individual work upon various machines, according to prescriptions previously given by Dr. Anderson. After that, if the student be so fortunate as to have already been selected as a probable member of the Yale crew, he goes to the tank room, and pulls a ten foot oar for half an hour, as if he thought he could break it. Then his bath, plunge and rub down, and then to his club with an appetite that would shame a Sandow.

The street cars leaving the campus reached the boat house in about fifteen minutes. It is distant about a mile and a half from the gymnasium. After their hard work in the gymnasium and in the rowing tank, the crew with their stalwart captain had run down from the college, launched the eight-oared shell and were half a mile away on the water by the time the street car arrived at the float.

To tell in detail what is going on at Harvard would be to repeat practically what has been said of Yale. The same general line of work is being followed as to preliminary and actual training, but, owing to ice in the river, the Harvard crew have had no outdoor work as yet. Captain Goodrich has not definitely settled upon his men, but has no end of excellent material, and if Lovering is included in his crew he will have a wonder. The Journal man met Mr. Lovering in Dr. Sargent's office in the Hemenway Gymnasium.

"No, I do not know that I am to be a member of this year's crew at Harvard," said he. "I believe Captain Goodrich has not yet decided upon his men. Where do I train? Well, the funny part of it, so far as I am concerned, is that I do little or no training. I have been in college here for three years and I have been in the gymnasium scarcely half a dozen times in that period. My strength apparently came to me naturally. I have taken a good deal of out-of-door exercise, to be sure, but only for the pleasure it gave me, and not with an idea of training myself to any particular point. I have done more or less rowing, riding, running and bicycling of late years. I cannot say that I ever used the wheel as a recreation or that I ever had any idea of becoming a racing man. I used it more for a vehicle, and for a time-saver, in getting about from place to place."

Since the Sunday Journal published descriptions of this marvellous strong man he has been tormented to death by amateurs and professionals as well who wish him to pose for photographs. He tendered one of his latest characteristic pictures to the Journal, and it is reproduced here. It pictures the athlete throwing the discus, and, according to Mr. Lovering, it very effectively shows the display of his muscular development.

He was greatly interested in learning all he could about Cadwalader, Yale's Samson. If he and Cadwalader appear in the rival boats next July, some one will pull a boat in two if necessary to win.

Yale Athletes at Work in the University Gymnasium Practising with Special Appliances for Developing the Back, Neck, Waist, Chest and Arms.

AUXILIARY WAR SHIPS.

How an Atlantic Liner Could Be Turned Into an American Cruiser at Short Notice.

Every one of the fleet Atlantic liners is an auxiliary man-of-war. They could be turned into fighting ships at very short notice.

If you walk forward on the Etruria, the Umbria or the Campania, you will see the platforms upon which cannon can be mounted, close to the bow. Near the stern of these ships there are likewise places built where guns of heavy calibre can be put in place.

These gun platforms were constructed in the vessels when they were built, in accordance with the regulations of the Admiralty, which brings them within the British naval reserve. These vessels, by the way, may be distinguished at sea by the fact that they fly the flag of the British naval reserve, and not the regular British flag. Their commanders are also officers of the British naval reserve.

Four great vessels of the American Line belong to our naval reserve, and may be taken by the United States Government as auxiliary cruisers in case of war. These ships are the St. Paul, St. Louis, Paris and New York.

The St. Paul and St. Louis are American built ships. At the time of their construction for the American merchant marine they were built with a view to being turned into auxiliary men-of-war in case the United States Government wished so to use them.

The armament of the four auxiliary war ships of the American Line is now at the Brooklyn Navy Yard, and could be put in place in a very short time. All that it would be necessary to do would be for the Government to serve notice on the American Line that it wished to use the ships, put naval officers on board and send them to the Brooklyn Navy Yard to receive their armament and crews. The compensation for the loss of the vessels which the American Line would receive would be determined on a fair valuation by a board to be appointed in accordance with the law of May, 1892. It was under this law that the St. Paul and St. Louis were built.

The law provides that vessels of this kind "shall be constructed with particular reference to prompt and economical conversion into auxiliary naval cruisers, and according to plans and specifications to be agreed upon by and between the owners and the Secretary of the Navy, and they shall be of sufficient strength and stability to carry and sustain the working and operation of at least four effective rifled cannon of a calibre of not less than six inches, and shall be of the highest rating known to maritime commerce."

The plans for the St. Paul and St. Louis were submitted to the Secretary of the Navy, and by him turned over to a naval advisory board, and the modifications suggested by this board were carried out in the building of the ships. Naval officers were, moreover, detailed from time to time to examine the ships as they were being built. These gentlemen examined the vessels with special reference to their rapid conversion into auxiliary war ships.

The Government at the same time manufactured and set apart four six-inch rifled cannon for each of these new ships, with all of the machinery necessary to their proper working. These guns were sent to the Brooklyn Navy Yard, where there is also a full equipment of small arms to place on board in case it should be necessary to use the vessels.

When the Paris and the New York were brought under the American flag by the special act introduced in the House of Representatives by Bourke Cockran, provision was made at the same time to fit them as auxiliary cruisers of the American Navy in case the Government needed them. These two ships had been built in Great Britain in accordance with the plans of the Admiralty, which intended to use them as auxiliary cruisers in case of war.

They were fitted to receive heavy rifled cannon on both bow and stern. American naval officers inspected these vessels when they adopted the American register, and guns with which to put them in a fighting condition were set apart and stored in the Brooklyn Navy Yard.

Should there be a war between the United States and Spain at the present time these four vessels would undoubtedly be called into the service by the Secretary of the Navy. But a few days, it is estimated, would be necessary to put them in a fighting condition.

The rifled cannon which are waiting for them could be lifted into place by the great derricks of the Navy Yard and a detail of blue jackets from the other men-of-war would be set apart to man them. Officers from the navy would be put in command of them, and they might put to sea without a single person on board not belonging to the regular navy.

The American Line steamships carry no arms at the present time. The French liners, however, have a small armory of rifles and cutlasses. These vessels belong to the French naval reserve and their chief officers belong to the French Navy.

PREDICTS MILLENNIUM.

Here Is a Clergyman Who Says McKinley Will Be the Last President and Tells Why.

McKinley is to be the last President of the United States and Wall Street is to be transported to Jerusalem in the near future, according to the positive prediction of the Rev. Beverly O. Kinnear, a revivalist, who is now preaching in the Bible House. He says the millennium is due to arrive here September, 1901.

"Do not say that I preach the end of the world," said he; that only makes people laugh. I preach the end of the age. After that we shall all be taken off this continent and transported to another, if we are believers. If unbelievers, we shall be killed. The time for this is now close at hand. I quote few, very few, if any authorities.

"Sir Richard Proctor says: 'In about 1897-98 the heat of the sun will be so enormously increased by the impact of a comet as to destroy life upon this earth.' Sir J. W. Dawson wrote: 'I anticipate the destruction of the present state of things on the earth by conflagration from the teachings of science.'

"Dr. Frank M. Close, of Oakland, Cal., ex-president of the Tacoma Academy of Science, writes: 'The late seismic disturbance, which extended over the Middle and Southeastern States, was one of the preliminary throes of a great cataclysm.'

"These undoubted authorities show that the time is near at hand. We know that the end of the age is within this generation, but whether the present generation began in 1870 or in 1871 we do not know. That is where chronology is liable to err. But the time is near, and we must be watching for it.

"What will become of the present United States when the end of the world comes? It will be carried over to England. McKinley is to be the last President of the United States. Before the end of his term there will be a terrible European war. Nations are building warships and getting ready for it. More have been built within the past year than in the world's entire previous history.

"It is not certain how the end of the world will come," continued Dr. Kinnear. "That is not revealed as yet. If He descends to earth He will gather the faithful together and establish a kingdom in Jerusalem, and there rule His people 'with a rod of iron,' as the Scriptures say. If He decides to take us all up to heaven, He will do so and leave the others here. Either way it will be the millennium.

"The climate of the earth will not be severe, either from excessive cold or heat. Violent storms, either on land or sea, will be unknown, and the whole aspect of creation will be more beautiful. The animal world will no longer have ferocious beasts, or any creature to harm man or woman.

"What will become of Wall Street? That I can positively answer. Wall Street, three years from now, will be in Jerusalem. But its work will be over. Its usefulness will have been accomplished.

"And our politicians? The bad ones will be cast into outer darkness and the good ones transported to Jerusalem, where they can mix for a thousand years in the delights of the perfect reign of Christ, the millennium. Their mission then will be to follow Christ forever and forever.

"Now, when it comes to locating the day for this to begin, I must beg off a little. I used to believe in chronology, and all signs say that the world will come to an end March 29, 1899. But it may be September, 1901. That is my present belief. There is only a little difference. One is surely right. And the time is very near."